SW/East

#12

(FILE 'HOME' ENTERED AT 10:00:06 ON 10 JAN 2003)

FILE 'MEDLINE, CAPLUS, BIOSIS, AGRICOLA' ENTERED AT 10:00:08 ON 10 JAN 2003

L1	1942344	S (CO-EXPRESSIO OR EXPRESSION)
L2	26957	S (CO-EXPRESSION OR COEXPRESSION)
L3	0	S L2 (5N) (MULTIPLE (1N) VECTOR) (5N) (MULTIPLE (3N) (PROTEIN
L4	0	S L2 (10N) (MULTIPLE (1N) VECTOR) (10N) (MULTIPLE (3N) (PROTEI
L5	3	S L2 (10N) (MULTIPLE (1N) VECTOR)
L6	1	DUP REM L5 (2 DUPLICATES REMOVED)
L7	191	S L2 AND (MULTIPLE (3N) (PROTEIN OR POLYPEPTIDE))
L8	20	S L7 AND VECTOR
L9	12	DUP REM L8 (8 DUPLICATES REMOVED)
L10	677	S CO-TRANSFORMATION
L11	191	S L10 AND VECTOR
L12	2	S L11 AND (MULTIPLE (3N) (PROTEIN OR POLYPEPTIDE))
L13	1	DUP REM L12 (1 DUPLICATE REMOVED)
L14	61	S L11 AND (PROTEIN OR POLYPEPTIDE)
L15	33	DUP REM L14 (28 DUPLICATES REMOVED)
L16	370	S SEQUENTIAL (3N) TRANSFORMATION
L17	255	DUP REM L16 (115 DUPLICATES REMOVED)
L18	6	S L17 AND VECTOR
L19	459	S MULTIPLE (1N) TRANSFORMATION
L20	25	S L19 AND VECTOR
L21	24	DUP REM L20 (1 DUPLICATE REMOVED)

L15 ANSWER 21 OF 33 MEDLINE DUPLICATE 11
AN 95400336 MEDLINE
DN 95400336 PubMed ID: 7670503
TI Heat-inducible expression of FLP gene in maize cells.
AU Lyznik L A; Hirayama L; Rao K V; Abad A; Hodges T K
CS Department of Botany and Plant Pathology, Purdue University, West Lafayette, IN 47907, USA.
SO PLANT JOURNAL, (1995 Aug) 8 (2) 177-86.
Journal code: 9207397. ISSN: 0960-7412.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199510
ED Entered STN: 19951026
Last Updated on STN: 19951026
Entered Medline: 19951019
AB The soybean heat-shock gene promoter (Gmhsp 17.5-E) has been used to direct expression of gusA and FLP genes in maize cells. At inducible temperatures, in transient expression assays, gusA gene expression controlled by the heat-shock promoter is about 10-fold higher than the expression directed by the CaMV 35S promoter. The Gmhsp 17.5-E promoter preserves its regulatory functions in heterologous maize cells after random integration into genomic DNA. Heat-shock inducible expression of the FLP gene was investigated by **co-transformation** of the FLP expression **vector** (pHsFLP) and a recombination test **vector** (pUFNeoFmG) into maize protoplasts. Co-transformed protoplasts were incubated at 42 degrees C for 2 h. This treatment induced recombination of 20-25% of the available FRT sites in transient assays. As a result of heat-shock treatment of stably co-transformed maize cells, activation of gusA gene expression and an associated decrease or elimination of NPT-II activity in transgenic maize lines was observed. Molecular evidence was obtained of the expected DNA excision process catalyzed by the FLP **protein** in maize transgenic cells. Thus, the experiments presented in this paper indicate that the FLP **protein** can recognize and subsequently recombine the FRT target sites that had integrated into plant genomic DNA, and that regulated expression of the FLP gene is possible in maize cells using the soybean heat-shock promoter.